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The incidence of pulmonary neoplasms from the present study is presented in the following table.

INCIDENCE OF PULMONARY NEOPLASMS

Males									
0 ppm		300 ppm		3,000 ppm		6,000 ppm		10,000 ppm	
DOS (29)	SAC (21)	DOS (26)	SAC (24)	DOS (26)	SAC (24)	DOS (33)	SAC (17)	DOS (35)	SAC (15)
ALVEOLAR/BRONCHIOLAR ADENOMAS									
11	9	13	13	10	18	18	13	19	8
ALVEOLAR/BRONCHIOLAR CARCINOMAS									
3	2	1	1	1	4	4	3	6	0
TOTAL PULMONARY NEOPLASMS									
14	11	14	14	11	22	22	16	25	8
Females									
DOS (27)	SAC (23)	DOS (31)	SAC (19)	DOS (25)	SAC (25)	DOS (29)	SAC (21)	DOS (31)	SAC (19)
ALVEOLAR/BRONCHIOLAR ADENOMAS									
8	12	14	12	12	15	12	16	13	13
ALVEOLAR/BRONCHIOLAR CARCINOMAS									
0	0	3	0	2	0	2	0	4	0
TOTAL PULMONARY NEOPLASMS									
8	12	17	12	14	15	14	16	17	13

Lung tumors occur spontaneously in many strains of mice and the incidence varies between strain with a higher incidence in the males compared to the females. The neoplasms appear to arise either from the alveolar cells lining the pulmonary alveoli or from Clara cells found normally within bronchioles. Since these two types of lung neoplasms cannot be easily distinguished between at the light microscopic level, they are usually designated as alveolar/bronchio-
lar adenomas or carcinomas. The incidence varies quite markedly between different studies conducted in the same strain of mice in

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the same laboratory. The historical incidence of alveolar/bronchio-
lar adenomas and carcinomas in four, two-year chronic studies con-
ducted at IRDC from 1983 to 1985 is presented below.

HISTORICAL INCIDENCE (%) OF PULMONARY NEOPLASMS IN CD-1 MICE AT IRDC

Study	Males		Total	Females		Total
	Adenomas	Carcinomas		Adenomas	Carcinomas	
A	18.2	0.90	19.1	12.7	4.5	17.2
B	44.0	0	44.0	22.0	2.0	24.0
C	28.0	6.0	34.0	14.0	2.0	16.0
D	26.1	8.7	34.8	8.7	2.9	11.6

3. Summary

A variety of nonneoplastic and neoplastic lesions were seen in both sexes across dose levels and the majority of them appeared to not be related to the administration of the test article. Inflammation and brown pigment in the livers of the male mice were more prevalent in the treated than in the controls and may have been related to the administration of the test article. An increase in lung neoplasms was present in both the treated males and treated females compared to the controls. A dose response, however, was not evident.

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